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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/980,376

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Serge Haumont

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7590

02/18/2009

SQUIRE, SANDERS & DEMPSEY L.L.P.

8000 TOWERS CRESCENT DRIVE

14TH FLOOR

VIENNA, VA 22182-6212

EXAMINER

AJAYI, JOEL

ART UNIT

PAPER NUMBER

2617

MAIL DATE

DELIVERY MODE

02/18/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/980,376	Applicant(s) HAUMONT ET AL.	
	Examiner JOEL AJAYI	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-17,19,21-23,77,79-92,96-100,102,103,105-111 and 113-116 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-17,19,21-23,77,79-92,96-100,102,103,105-111 and 113-116 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 12, 2008 has been entered.

Response to Arguments

Applicant's arguments with respect to claims 1, 4-17, 19, 21-23, 77, 79-92, 96-100, 102, 103, 105-111, 113-116 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

Claims 1, 9, 12, 13, 16, 97, 98, 99, 106, 107, 108, 109, 110 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The expression “completely release” cannot be found in the specification.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 9, 12, 13, 19, 77, 84, 87, 88, 97-99, 102, 103, 105-108, 110, 111, 113-116 are rejected under 35 U.S.C. 102(b) as being anticipated by **Purchase et al. (U.S. Patent Number: 5,432,838)**.

Consider **claim 1**; Purchase discloses an apparatus in a cellular communications network (mobile radio network, fig. 3a), comprising:

a monitor configured to monitor at least one parameter related to a connection between a mobile station and a support node (the controller collects data/statistics), said at least one parameter comprising user activity (column 13, lines 43-58); and a determining unit configured to determine whether the connection between said support node and said mobile station is to be released based solely on said at least one parameter monitored by said monitor, wherein the apparatus is configured to completely release the connection when there is user inactivity for a predetermined period of time (the connection is completely released) (column 13, lines 43-58).

Consider **claim 9**; Purchase discloses an apparatus in a cellular communications network (mobile radio network, fig. 3a), comprising:

a monitor configured to monitor at least one parameter related to a connection between a mobile station and a support node (the controller collects data/statistics), said at least one parameter comprising an elapsed time since a last use of the connection (column 13, lines 43-58); and a determining unit configured to determine whether the connection between said support node and said mobile station is to be released based solely on said at least one parameter monitored by said monitor, wherein the apparatus is configured to provide the connection between the mobile station and the support node, and further configured to completely release

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the connection when the connection has not been used for a predetermined time (the connection is completely released) (column 13, lines 43-58).

Consider **claim 12**; Purchase discloses an apparatus in a cellular communications network (mobile radio network, fig. 3a), comprising:

a monitor configured to monitor at least one parameter related to a connection between a mobile station and a support node (the controller collects data/statistics), said at least one parameter comprising a state of said mobile station (column 13, lines 43-58); and a determining unit configured to determine whether the connection between said support node and said mobile station is to be released based solely on said at least one parameter monitored by said monitor, wherein the apparatus is configured to provide the connection between the mobile station and the support node, and further configured to completely release the connection based on the state of the mobile station (inactivity) (column 13, lines 43-58).

Consider **claim 13**; Purchase discloses an apparatus in a cellular communications network (mobile radio network, fig. 3a), comprising:

a monitor configured to monitor at least one parameter related to a connection between a mobile station and a support node (the controller collects data/statistics), said at least one parameter comprising a movement of the mobile station (inactivity) (column 13, lines 43-58); and a determining unit configured to determine whether the connection between said support node and said mobile station is to be released based solely on said at least one parameter monitored by said monitor, wherein the apparatus is configured to provide the connection between the mobile station and the support node, and further configured to completely release

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the connection based on the movement of the mobile station (inactivity) (column 13, lines 43-58).

Consider **claims 19, 77, 84, 87, 88**; Purchase discloses a cellular communications network (mobile radio network), comprising: an apparatus, a mobile station and a support node (column 13, lines 43-58; fig. 3a).

Consider **claim 97**; Purchase discloses an apparatus comprising:

a monitor configured to monitor at least one parameter related to a connection between a mobile station and a support node (the controller collects data/statistics), said at least one parameter comprising at least one of a state of the mobile station, a movement of the mobile station, or an amount of communications between the mobile station and a radio network controller (column 13, lines 43-58); and a determining unit configured to determine whether the connection between said support node and said mobile station is to be released based solely on said at least one parameter monitored by said monitor, wherein the apparatus is configured to provide the connection between the mobile station and the support node, and further configured to completely release the connection based on said at least one parameter (the connection is completely released) (column 13, lines 43-58).

Consider **claim 98**; Purchase discloses an apparatus comprising:

a processor configured to monitor at least one parameter related to a connection between a mobile station and a support node and to determine whether the connection between said support node and said mobile station is to be released based solely on said at least one parameter (column 13, lines 43-58), wherein the apparatus is implemented in a cellular communication network (mobile radio network, fig. 3a), and wherein said apparatus is configured to provide the

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connection between the mobile station and the support node, and further configured to completely release the connection based on said at least one parameter (the connection is completely released) (column 13, lines 43-58).

Consider **claim 99**; Purchase discloses a method comprising: establishing a connection between a mobile station and a support node in a cellular communications network through a radio network controller (column 13, lines 43-58); monitoring, at the radio network controller, at least one parameter related to the connection between the mobile station and the support node (column 13, lines 43-58); determining, at the radio network controller, whether the connection between said support node and said mobile station is to be released based solely on said at least one parameter (inactivity) (column 13, lines 43-58); and releasing completely, by the radio network controller, the connection between said support node and said mobile station based on said at least one parameter (the connection is completely released) (column 13, lines 43-58).

Consider **claim 102**; Purchase discloses that the apparatus is further configured to release the connection between the apparatus and said mobile station dependent solely on only one parameter monitored by said monitor (inactivity) (column 13, lines 43-58).

Consider **claims 103, 111**; Purchase discloses that at least one parameter comprises user activity, and determining to release said connection when there is user inactivity for a predetermined period of time (column 13, lines 43-58).

Consider **claims 105, 113**; Purchase discloses that monitoring comprises monitoring only one parameter related to the connection between the mobile station and the support node, and wherein the determining comprises determining to release the connection between a network

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element and said mobile station based solely on the only one monitored parameter (column 13, lines 43-58).

Consider **claim 106**; Purchase discloses an apparatus in a cellular communications network (mobile radio network, fig. 3a), comprising:

Monitoring means for monitoring at least one parameter related to a connection between a mobile station and a support node (the controller collects data/statistics), said at least one parameter comprising an elapsed time since a last use of the connection (column 13, lines 43-58); and determining means for determining whether the connection between said support node and said mobile station is to be released based solely on said at least one parameter monitored by said monitoring means, wherein the apparatus is configured to provide the connection between the mobile station and the support node, and further configured to completely release the connection when the connection has not been used for a predetermined time (the connection is completely released) (column 13, lines 43-58).

Consider **claim 107**; Purchase discloses an apparatus in a cellular communications network (mobile radio network, fig. 3a), comprising:

Monitoring means for monitoring at least one parameter related to a connection between a mobile station and a support node (the controller collects data/statistics), said at least one parameter comprising a state of said mobile station (column 13, lines 43-58); and determining means for determining whether the connection between said support node and said mobile station is to be released based solely on said at least one parameter monitored by said monitor, wherein the apparatus is configured to provide the connection between the mobile station and the

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support node, and further configured to completely release the connection based on the state of the mobile station (inactivity) (column 13, lines 43-58).

Consider **claim 108**; Purchase discloses an apparatus in a cellular communications network (mobile radio network, fig. 3a), comprising:

Monitoring means for monitoring at least one parameter related to a connection between a mobile station and a support node (the controller collects data/statistics), said at least one parameter comprising a movement of the mobile station (inactivity) (column 13, lines 43-58); and determining means for determining whether the connection between said support node and said mobile station is to be released based solely on said at least one parameter monitored by said monitor, wherein the apparatus is configured to provide the connection between the mobile station and the support node, and further configured to completely release the connection based on the movement of the mobile station (inactivity) (column 13, lines 43-58).

Consider **claim 110**; Purchase discloses a computer readable storage medium encoded with instructions that, if executed by a computer, perform a process, the process comprising:

Establishing a connection between a mobile station and a support node in a communication network through a radio network controller (column 13, lines 43-58; fig. 3a); monitoring, at the radio network controller, at least one parameter related to the connection between the mobile station and the support node (column 13, lines 43-58); determining, at the radio network controller, whether the connection between said support node and said mobile station is to be released based solely on said at least one parameter (column 13, lines 43-58); and releasing completely, by the radio network controller, the connection between said support node and said

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mobile station based on said at least one parameter (the connection is completely released) (column 13, lines 43-58).

Consider **claim 114-116**; Purchase discloses that the apparatus is a radio network controller (column 13, lines 43-58).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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Claims 4-8, 10, 11, 23, 79-83, 85, 86 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Purchase et al. (U.S. Patent Number: 5,432,838)** in view of **Larsson et al. (U.S. Patent Number 6,643,262)**.

Consider **claims 4, 23**; Purchase discloses the claimed invention except: the apparatus is further configured to send a message to the support node indicating that said connection has been released.

In an analogous art Larsson discloses that the apparatus (adaptor) is further configured to send a message (notify) to the support node (telephone exchange) indicating that said connection has been released (column 15, lines 1-15).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Purchase by including sending a message indicating a connection release as taught by Larsson for the purpose of reusing telecommunication system resources during periods of inactivity.

Consider **claim 5**; Larsson discloses that the apparatus (adaptor) is further configured to send a request for the connection to be released to said mobile station (the pause signal sent leads to the release of the connection) (column 11, lines 16-27; column 15, lines 7-15).

Consider **claim 6**; Larsson discloses that the support node is configured to send a connection release command to said apparatus in response to the release request received by said apparatus (the adaptor notifies the telephone exchange of the inactivity), and wherein said apparatus is further configured to control the release of said connection (the pause signal sent by the adaptor leads to the release of the connection) (column 11, lines 16-27; column 15, lines 1-15).

Consider **claim 7**; Larsson discloses that the apparatus (adaptor) is further configured to send a release request to said mobile station in response to the release command received from said support node (the pause signal sent by the adaptor, which affects the mobile station and the telephone exchange, leads to the release of the connection) (column 11, lines 16-27; column 15, lines 1-15).

Consider **claim 8**; Larsson discloses that the apparatus (adaptor) is further configured to send a message to said support node advising that the connection has been released (the telephone exchange is aware of the connection release) (column 11, lines 16-27; column 15, lines 7-15).

Consider **claim 10**; Larsson discloses that the predetermined time depends on the type of traffic (burst) for which the connection is intended (column 11, lines 16-27).

Consider **claim 11**; Larsson discloses that the predetermined time depends on the quality of service profile of the traffic for which the connection is intended (column 1, lines 16-48; column 11, lines 16-27).

Consider **claims 79-83, 85, 86**; Purchase discloses a cellular communications network (mobile radio network), comprising: an apparatus, a mobile station and a support node (column 13, lines 43-58; fig. 3a).

Claims 14-17, 21, 22, 89-92, 96, 100, 109 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Purchase et al. (U.S. Patent Number: 5,432,838)** in view of **Stephenson et al. (U.S. Patent Number: 6,119,000)**.

Consider **claim 14**; Purchase discloses the claimed invention except: an amount of updating information received in a given time from the mobile station is used as a measure of the movement of the mobile station.

In an analogous art Stephenson discloses that an amount of updating information received in a given time from the mobile station is used as a measure of the movement of the mobile station (column 7, lines 1-21).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Purchase by including a mobile station's movement, as taught by Stephenson, for the purpose of efficiently managing network resources.

Consider **claim 15**; Stephenson discloses that updating information comprises universal mobile telecommunication systems terrestrial radio access network registration area updates (column 7, lines 1-21).

Consider **claim 16**; Purchase discloses an apparatus in a cellular communications network (mobile radio network, fig. 3a), comprising:

A monitor configured to monitor at least one parameter related to a connection between a mobile station and a support node (the controller collects data/statistics) (column 13, lines 43-58); and a determining unit configured to determine if the connection between said support node and said mobile station is to be released dependent solely on said at least one parameter monitored by said monitor, wherein the apparatus is configured to provide the connection between the mobile station and the support node (column 13, lines 43-58).

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Except: at least one parameter comprises a location of the mobile station, and said determining unit is further configured to determine if the connection should be released based on the location of the mobile station monitored by said monitor.

In an analogous art, Stephenson discloses at least one parameter comprises a location of the mobile station, and said determining unit is further configured to determine if the connection should be released based on the location of the mobile station monitored by said monitor (column 6, lines 21-25; column 12, lines 10-30).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Purchase by including a mobile station's movement, as taught by Stephenson, for the purpose of efficiently managing network resources.

Consider **claim 17**; Stephenson discloses that at least one parameter comprises associations of the mobile station with different apparatus (MSC and BTS), and said determining unit being further configured to determine that the connection should be released if said monitor indicates that the mobile station is associated with different apparatus (column 6, lines 21-25, 55-59; column 12, lines 10-30).

Consider **claims 21, 100**; Stephenson discloses that the support node is a serving general packet radio service support node (SGSN is responsible for the delivery of data packets to and from mobile stations in its area, MSC performs the same function) (column 6, lines 21-25; column 8, lines 30-39; column 12, lines 10-30).

Consider **claims 22, 96**; Stephenson discloses that the network operates in accordance with a universal mobile telecommunication systems standard (UMTS is based on GSM) (column 6, lines 21-25, 55-59; column 12, lines 10-30).

Consider **claims 89-92**; Purchase discloses a cellular communications network (mobile radio network), comprising: an apparatus, a mobile station and a support node (column 13, lines 43-58; fig. 3a).

Consider **claim 109**; Purchase discloses an apparatus in a cellular communications network (mobile radio network, fig. 3a), comprising:

Monitoring means for monitoring at least one parameter related to a connection between a mobile station and a support node (the controller collects data/statistics) (column 13, lines 43-58); determining means for determining if the connection between said support node and said mobile station is to be released dependent solely on said at least one parameter monitored by said monitor, wherein the apparatus is configured to provide the connection between the mobile station and the support node (column 13, lines 43-58).

Except: at least one parameter comprises a location of the mobile station, and said determining unit is further configured to determine if the connection should be released based on the location of the mobile station monitored by said monitor.

In an analogous art, Stephenson discloses at least one parameter comprises a location of the mobile station, and said determining unit is further configured to determine if the connection should be released based on the location of the mobile station monitored by said monitor (column 6, lines 21-25; column 12, lines 10-30).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Purchase by including a mobile station's movement, as taught by Stephenson, for the purpose of efficiently managing network resources.

Conclusion

Any response to this Office Action should be **faxed to (571) 273-8300 or mailed to:**

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Hand-delivered responses should be brought to

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Randolph Building
401 Dulany Street
Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Joel Ajayi whose telephone number is (571) 270-1091. The Examiner can normally be reached on Monday-Friday from 7:30am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Lester Kincaid can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Joel Ajayi

February 13, 2009

/Lester Kincaid/

Supervisory Patent Examiner, Art Unit 2617